

specification, and in particular at page 3, line 36 to page 4, line 1, at page 6, lines 16-24, at page 3, lines 6-15, at page 4, lines 26-29, and at page 28, line 18 to page 34, line 26.

D³ 38. (Amended) An antibody that is directed against a TRAIL receptor (TRAIL-R) polypeptide selected from the group consisting of:

- a) amino acids 52-440 of SEQ ID NO:2; and
- b) a fragment of (a), wherein said fragment is capable of binding TRAIL, or an antigen-binding fragment of said antibody.

40. (New) The antibody or antigen-binding fragment of claim 38 wherein the polypeptide consists essentially of amino acids 52-210 of SEQ ID NO:2.

41. (New) An antibody that specifically binds to a TRAIL-R polypeptide selected from the group consisting of:

- a) amino acids x to 440 of SEQ ID NO:2, wherein x represents an integer from 51 through 59; and
- b) a fragment of (a), wherein said fragment is capable of binding TRAIL, or an antigen-binding fragment of said antibody.

42. (New) The antibody or antigen-binding fragment of claim 41 wherein the polypeptide consists essentially of amino acids x to 210 of SEQ ID NO:2.

D⁴ 43. (New) An antibody that specifically binds to a TRAIL-R polypeptide selected from the group consisting of:

- (a) a polypeptide that binds TRAIL and can be isolated from human cell membranes, wherein the TRAIL-R is characterized as comprising the amino acid sequence VPANEGD (amino acids 327-333 of SEQ ID NO:2); and
- (b) a fragment of (a), wherein said fragment is capable of binding TRAIL, or an antigen-binding fragment of said antibody.

44. (New) The antibody or antigen-binding fragment of claim 43 wherein said polypeptide is further characterized by a molecular weight of about 50 to 55 kilodaltons as determined by SDS-polyacrylamide gel electrophoresis.

45. (New) The antibody or antigen-binding fragment of claim 43 wherein said polypeptide is further characterized by comprising the amino acid sequence ETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLXTML (SEQ ID NO:4).

46. (New) The antibody or antigen-binding fragment of claim 38, wherein the antibody is a monoclonal antibody.

47. (New) The antibody or antigen-binding fragment of claim 40, wherein the antibody is a monoclonal antibody.

48. (New) The antibody or antigen-binding fragment of claim 41, wherein the antibody is a monoclonal antibody.

49. (New) The antibody or antigen-binding fragment of claim 42, wherein the antibody is a monoclonal antibody.

50. (New) The antibody or antigen-binding fragment of claim 43, wherein the antibody is a monoclonal antibody.

51. (New) The antibody or antigen-binding fragment of claim 44, wherein the antibody is a monoclonal antibody.

52. (New) The antibody or antigen-binding fragment of claim 45, wherein the antibody is a monoclonal antibody.

53. (New) The antibody or antigen-binding fragment of claim 38, wherein the antibody is a humanized antibody.

54. (New) The antibody or antigen-binding fragment of claim 40, wherein the antibody is a humanized antibody.

55. (New) The antibody or antigen-binding fragment of claim 41, wherein the antibody is a humanized antibody.

56. (New) The antibody or antigen-binding fragment of claim 42, wherein the antibody is a humanized antibody.

57. (New) The antibody or antigen-binding fragment of claim 43, wherein the antibody is a humanized antibody.

58. (New) The antibody or antigen-binding fragment of claim 44, wherein the antibody is a humanized antibody.

59. (New) The antibody or antigen-binding fragment of claim 45, wherein the antibody is a humanized antibody.

60. (New) A composition comprising the antibody or antigen-binding fragment of claim 38 and a physiologically acceptable diluent, excipient, or carrier.

61. (New) A composition comprising the antibody or antigen-binding fragment of claim 40 and a physiologically acceptable diluent, excipient, or carrier.

62. (New) A composition comprising the antibody or antigen-binding fragment of claim 41 and a physiologically acceptable diluent, excipient, or carrier.

63. (New) A composition comprising the antibody or antigen-binding fragment of claim 42 and a physiologically acceptable diluent, excipient, or carrier.

64. (New) A composition comprising the antibody or antigen-binding fragment of claim 43 and a physiologically acceptable diluent, excipient, or carrier.

65. (New) A composition comprising the antibody or antigen-binding fragment of claim 44 and a physiologically acceptable diluent, excipient, or carrier.

66. (New) A composition comprising the antibody or antigen-binding fragment of claim 45 and a physiologically acceptable diluent, excipient, or carrier.

67. (New) A conjugate comprising a detectable or therapeutic agent attached to the antibody or antigen-binding fragment of claim 38.

68. (New) A conjugate comprising a detectable or therapeutic agent attached to the antibody or antigen-binding fragment of claim 40.

69. (New) A conjugate comprising a detectable or therapeutic agent attached to the antibody or antigen-binding fragment of claim 41.

70. (New) A conjugate comprising a detectable or therapeutic agent attached to the antibody or antigen-binding fragment of claim 42.

71. (New) A conjugate comprising a detectable or therapeutic agent attached to the antibody or antigen-binding fragment of claim 43.

72. (New) A conjugate comprising a detectable or therapeutic agent attached to the antibody or antigen-binding fragment of claim 44.

73. (New) A conjugate comprising a detectable or therapeutic agent attached to the antibody or antigen-binding fragment of claim 45.